



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,338	03/10/2005	Kazunori Kusano	082407	3526
38834 7590 07/15/2010 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			EXAMINER SINGH, SUNIL K	
			ART UNIT 3732	PAPER NUMBER
			NOTIFICATION DATE 07/15/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary	Application No. 10/527,338	Applicant(s) KUSANO, KAZUNORI	
	Examiner Sunil K. Singh	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3,4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano (US 6,508,647) in view of Gleave et al. (US 4,105,715).

Kusano discloses a kit (Figs. 7 and 8) that includes: a probe syringe (1); a current detector device (101); a discharge part (4) formed with a flexible hollow material (Column 6, Lines 40-41) and being positioned on top of the probe syringe (Fig. 3a); a cylinder part (2) continuous to said discharge part and retaining an ion conductive paste (D) (Fig. 3a); a piston (3) inserted into cylinder (Fig. 3a); and an electric conductive member (10) (Column 7, Lines 1-10) connecting inner and outer areas of said probe syringe and disposed across the discharge part (Figs. 3a and 3b) (Column 3, Lines 28-45); and the ion conductive paste comprises conductive material selected from the group propylene glycol (Column 4, Line 33; and Column 2, Line 57). However, Kusano fails to disclose the ion conductive paste being aqueously dispersed and having thixotropic properties and wherein the thixotropic ion conductive paste has the viscosity from 0.1 Pa to 5 Pa and thixotropy.

Gleave teaches a paste that has thixotropic properties that are aqueously dispersed since pastes having thixotropic properties have strong consistency-imparting properties thus retaining most of the bond strength (Column 2, Lines 25-30). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kusano to include a paste having thixotropic properties, as taught by Gleave, in order to provide a paste that retains most of its bond strength. Kusano/Gleave does disclose a paste and therefore the paste has an inherent viscosity. However, Kusano/Gleave fail to disclose the thixotropic ion conductive paste having a viscosity that specifically ranges from 0.1 Pas to 5 Pas. It would have been obvious to one having ordinary skill in the art to modify Kusano/Gleave to include a paste having the claimed low viscosity ranges in order to ensure easy flow of the paste through a syringe having a small diameter opening. Furthermore, it would have been obvious to one having ordinary skill in the art to modify Kusano/Gleave by including a thixotropic ion conductive paste having a viscosity in the range from 0.1 Pa to 5 Pa, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. See *In re Aller*, 105 USPQ 233.

3. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano in view of Gleave and further in view of Caizza (US 5,964,737).

Kusano/Gleave discloses the invention substantially as claimed except for a syringe having a discharge part made of silicone rubber.

Caizza teaches a syringe having an end piece (34 in Fig. 2b) made out of silicone rubber in order to provide a tip with elastomeric properties (Column 7, Lines 43-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kusano/Gleave by having the discharge part of the syringe being made of silicone rubber, as taught by Caizza, in order to provide a syringe tip with elastomeric properties.

Response to Amendment

4. The declaration under 37 CFR 1.132 filed 05/11/2010 is insufficient to overcome the rejection of claims 1,3,4 and 6-10 based upon rejection over Kusano in view of Gleave as set forth in the last Office action because: The Examiner is not using the exact paste but rather the teaching of using a paste having thixotropic properties and the advantages of using a thixotropic paste (see rejection above). However, if the Examiner was to use Gleave for his exact paste, the affidavit is still not persuasive since the statements appear to be mere statements and are not supported by any experimental results.

Response to Arguments

5. Applicant's arguments filed 05/11/2010 have been fully considered but they are not persuasive. As explained above, the Examiner is merely using Gleave to teach the advantage of using a thixotropic paste and not the exact paste itself. Again, if the Examiner were to use the exact paste, the Applicant has not provided any affidavits to sufficiently persuade the Examiner. The affidavits should provide sufficient

Art Unit: 3732

experimental results to support the statements made in the Applicant's remarks and declaration.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday (Increased Flex Schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

07/09/2010

/Sunil K Singh/
Examiner, Art Unit 3732

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732